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OM protein - protein search, using sw model

Run on: November 30, 2002, 12:29:03 : Search time 13.7463 Seconds

(without alignments)
1066.922 Million cell updates/sec

US-10-054-680-2

Sequence: 1 MAMLRQLPLTSAFLHFGVLT.....LMLLYIFATLEAVCYIKGF 921

Scoring table:

BLOSUM62
Gapop 10.0, Gapext 0.5

searched: 102317 seqs, 15924203 residues

Total number of hits satisfying chosen parameters: 102317

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database:

Published Applications AA:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	4797	100.0	921	US-09-804-474A-2	Sequence 2, Appl1
2	4797	100.0	921	US-10-054-680-2	Sequence 2, Appl1
3	4686	97.7	927	US-09-804-474A-4	Sequence 4, Appl1
4	3425.5	71.4	970	US-09-901-419-2	Sequence 2, Appl1
5	3093	64.5	620	US-10-054-680-4	Sequence 4, Appl1
6	2143.5	44.7	609	US-09-864-761-33429	Sequence 33429, A
7	424	8.8	91	US-09-864-761-33926	Sequence 33926, A
8	239.5	5.0	661	US-10-094-214-5	Sequence 5, Appl1
9	234.5	4.9	603	US-09-961-679-2	Sequence 2, Appl1
10	194.5	4.1	152	US-10-094-214-4	Sequence 4, Appl1
11	165	3.4	353	US-09-961-679-6	Sequence 6, Appl1
12	162.5	3.4	316	US-09-961-679-4	Sequence 4, Appl1
13	151	3.1	42	US-09-864-761-37185	Sequence 37185, A
14	116.5	2.4	584	US-10-094-214-2	Sequence 2, Appl1
15	116	2.4	657	US-09-815-242-12135	Sequence 12135, A
16	116	2.4	657	US-09-815-242-13013	Sequence 13013, A
17	115.5	2.4	1786	US-09-742-096-3	Sequence 3, Appl1
18	112.5	2.3	1202	US-09-864-761-43061	Sequence 43061, A
19	109.5	2.3	486	US-09-815-242-13455	Sequence 13455, A

20	108	2.3	721	9	US-10-121-032-19	Sequence 19, Appl1
21	108	2.3	1616	9	US-09-712-363-262	Sequence 262, Appl1
22	106	2.2	408	10	US-09-815-242-10136	Sequence 10136, A
23	104	2.2	652	10	US-09-815-242-5896	Sequence 5896, Ap
24	104	2.2	995	10	US-09-864-761-49017	Sequence 49017, A
25	102	2.1	1115	10	US-09-781-558-2	Sequence 2, Appl1
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28	101	2.1	1381	10	US-09-930-871-8	Sequence 8, Appl1
29	101	2.1	1387	10	US-09-930-871-10	Sequence 10, Appl1
30	101	2.1	1392	10	US-09-930-871-18	Sequence 18, Appl1
31	101	2.1	1398	10	US-09-930-871-20	Sequence 20, Appl1
32	101	2.1	1442	10	US-09-930-871-6	Sequence 6, Appl1
33	101	2.1	1453	10	US-09-930-871-16	Sequence 16, Appl1
34	101	2.1	1962	10	US-09-930-871-4	Sequence 4, Appl1
35	101	2.1	1973	10	US-09-930-871-14	Sequence 14, Appl1
36	101	2.1	1998	10	US-09-930-871-2	Sequence 2, Appl1
37	101	2.1	2009	10	US-09-930-871-12	Sequence 12, Appl1
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39	99.5	2.1	569	10	US-09-931-147-2	Sequence 5229, Ap
40	99.5	2.1	1184	10	US-09-815-242-5229	Sequence 12125, A
41	99.5	2.1	1188	10	US-09-815-242-12125	Sequence 13243, A
42	98	2.0	616	10	US-09-815-242-13243	Sequence 13566, A
43	98	2.0	616	10	US-09-815-242-13566	Sequence 84, Appl1
44	97.5	2.0	722	10	US-09-765-272-84	Sequence 2, Appl1
45	97.5	2.0	1614	9	US-09-887-540A-2	

ALIGNMENTS

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RESULT 1
US-09-804-474A-2
Sequence 2, Application US/09804474A
Patent No. US20020119518A1
GENERAL INFORMATION:
; APPLICANT: KODAK, Stefan, et al
; TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
; TITLE OF INVENTION: AND USES THEREOF
; FILE REFERENCE: CLO00891
; CURRENT APPLICATION NUMBER: US/09/804,474A
; CURRENT FILING DATE: 2001-03-13
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 921
; TYPE: PRT
; ORGANISM: Human
US-09-804-474A-2

Query Match
Best Local Similarity 100.0% Score 4797; DB 10; Length 921;
Matches 921; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 MAMLRQLPLTSAFLHFGVLTFLVPLNGLAFAEGSGSDVSTGONNCSGSSDCKRGVLT 60
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61 PMYEPNPISGDKIRAVIYFVALIYMFGLVSIIDRFMASTLEVTISQREVTIKKPNCE 120
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121 TSTTIRVWNETVSNLTALGSSAPEILLSTIEVCGHFIAGDLPSTIVGSAAFNMF 180
121 TSTTIRVWNETVSNLTALGSSAPEILLSTIEVCGHFIAGDLPSTIVGSAAFNMF 180
181 IIGICVYVPDEETKIKRLRFFITTAANSIFAYIMLVIAVFSFGVQVVEGLTLTF 240
181 IIGICVYVPDEETKIKRLRFFITTAANSIFAYIMLVIAVFSFGVQVVEGLTLTF 240
241 PFVCVLLAVAAKRLLEFYKMKKRYTDCRGIITETGDPKGIEMDKMNSHFLDGN 300
241 PFVCVLLAVAAKRLLEFYKMKKRYTDCRGIITETGDPKGIEMDKMNSHFLDGN 300
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Db 241 FVPCVLLAWVADRLLEFKYMKKRYTDKRGIIIEEGDHPKGIEMDGKMMNSHFLDGN 300
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Db 301 LVPLEGKEVEDSRREMIIRILKDLKOKHPEKDLQVEMANYVALSHOOKSRATRYRIOATR 360
OY 361 MMTGAGNIIKKHAAEQAKKASMSSEVHTDEPEDFISKVFEDPCSYOCLENGCAVLLTVVR 420
Db 361 MMTGAGNIIKKHAAEQAKKASMSSEVHTDEPEDFISKVFEDPCSYOCLENGCAVLLTVVR 420
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Db 421 KGGDMSKTMVVDKKTEDGSNAGADYEFTEGTIVLKPGEYQKFEVSIGIIDDOLFEEDEHR 480
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Db 481 FVRLSNVRIEEOPEEGMPAIFNSLPLPRAVLASPCVATVTLDDDHAGIFFEEDCTIH 540
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Db 541 VSESIGVMEVKVLRSGARCTVLPFRVEGTAKGGGEDEDTYGELEFKNDETIVKTRV 600
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Db 661 EVIIEESYEKTTVDKLIKTKTNLALVVGTHSMRDQFMEATTVSAAGDEDEDESGEERLPS 720
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Db 721 CFDYVMHFLTVFKKVLPAFCVPTEYCHGACFAVSIIIGMLTAIIGDLASHFGCTIGLK 780
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Db 841 WALOGGEFHVSAGTIAFSVTLFTIFAFVCISVLYLRRRPHLGGELGPRCKLATWMLFY 900
OY 901 STMWLVIYLFATLEAYCYINGF 921
Db 901 STMWLVIYLFATLEAYCYINGF 921

RESULT 2
US-10-054-680-2
Sequence 2, Application US/10054680
Patent No. US2002013298A1
GENERAL INFORMATION:
; APPLICANT: Fridde, Carl Johan
; APPLICANT: Hilbun, Erlin
; TITLE OF INVENTION: No. US2002013298A1el Human Ion Exchanger Proteins and Polynucle
; FILE REFERENCE: Lex-0301-USA
; CURRENT APPLICATION NUMBER: US/10/054,680
; CURRENT FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: US 60/263,384
; PRIOR FILING DATE: 2001-01-23
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 921
; TYPE: prt
; ORGANISM: homo sapiens
US-10-054-680-2

Query Match 100.0%; Score 4797; DB 12; Length 921;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 921; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 61 PIYRPENPSIGDKIARYIVFVALLIYFGLVSIIDRPFMAISEVITISQEEVITIKPNGE 120
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Db 121 TSTTTIRVWNETVSNLTLMAGSSAPEILSLLEVCGHGFIAGDLGPSTVGSAAFMFI 180
OY 181 IIGICVYVDPGETRKIKHLRVEPITAAMSIFAYIMLMLAVSPGVYVWEGLLTFE 240
Db 181 IIGICVYVDPGETRKIKHLRVEPITAAMSIFAYIMLMLAVSPGVYVWEGLLTFE 240
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Db 241 FVPCVLLAWVADRLLEFKYMKKRYTDKRGIIIEEGDHPKGIEMDGKMMNSHFLDGN 300
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Db 301 LVPLEGKEVEDSRREMIIRILKDLKOKHPEKDLQVEMANYVALSHOOKSRATRYRIOATR 360
OY 361 MMTGAGNIIKKHAAEQAKKASMSSEVHTDEPEDFISKVFEDPCSYOCLENGCAVLLTVVR 420
Db 361 MMTGAGNIIKKHAAEQAKKASMSSEVHTDEPEDFISKVFEDPCSYOCLENGCAVLLTVVR 420
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Db 421 KGGDMSKTMVVDKKTEDGSNAGADYEFTEGTIVLKPGEYQKFEVSIGIIDDOLFEEDEHR 480
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Db 481 FVRLSNVRIEEOPEEGMPAIFNSLPLPRAVLASPCVATVTLDDDHAGIFFEEDCTIH 540
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Db 601 KIYDEEYERQENFETALGEPKMERGISDVTDRKLTMEEEKKRIAEMKRPVLGHPKL 660
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Db 901 STMWLVIYLFATLEAYCYINGF 921

RESULT 3
US-09-804-474A-4
; Sequence 4, Application US/09804474A
; Patent No. US20020119518A1
GENERAL INFORMATION:
; APPLICANT: Kodet, Stefan et al
; TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
; TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUMAN TRANSPORTER PROTEINS,

;; TITLE OF INVENTION: AND USES THEREOF
;; FILE REFERENCE: CLO00891
;; CURRENT APPLICATION NUMBER: US/09/804,474A
;; CURRENT FILING DATE: 2001-03-13
;; NUMBER OF SEQ ID NOS: 4
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 4
;; LENGTH: 927
;; TYPE: PRT
;; ORGANISM: Rat
;; US-09-804-474A-4

Query Match 97.7%; Score 4686; DB 10; Length 927;
Best Local Similarity 96.8%; Pred. No. 0;
Matches 897; Conservative 14; Mismatches 10; Indels 6; Gaps 1;

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Db 61 PLWYENSLGDKIRAVIYFVALIYMLFGVSIINDRFMASTEVITSOEYTIKKPNGE 120
QY 121 TSTTIRWNETVSNLTLMALGSSAPEILLIEVCGHGFAGDLPSTTVGSAFNMFI 180
Db 121 TSTTIRWNETVSNLTLMALGSSAPEILLIEVCGHGFAGDLPSTTVGSAFNMFI 180
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Db 181 IIGICVYVIPDGETRKIKHLRVFEFTAAWSIFAYIMLMIILAFSPGVQVMEGLTLTF 240
QY 241 FPVCLLAWVADKRLFFKYMHRKRTDKHRCIIETBEDHKGKLEMCKMANSHPLDGN 300
Db 241 FPVCLLAWVADKRLFFKYMHRKRTDKHRCIIETBEDHKGKLEMCKMANSHPLDGN 300
QY 301 LVPLEKGEVDESRRMIRILKDLKOKHPEKIDQLVEMANYALSHOOKSRAFYRIQATR 360
Db 301 LVPLEKGEVDESRRMIRILKDLKOKHPEKIDQLVEMANYALSHOOKSRAFYRIQATR 360
QY 361 MMTGAGNLLKHAQAOKKASSMSEVHTDEPEDFTSKYFEDPCSYOCLENCAGVLLTVVR 420
Db 361 MMTGAGNLLKHAQAOKKASSMSEVHTDEPEDFTSKYFEDPCSYOCLENCAGVLLTVVR 420
QY 421 KGGDSKTMVVDYKTEDGSANAGADYEETEGTVVLKPGETOKESVGIIDDDIFEDDEF 480
Db 421 KGGDSKTMVVDYKTEDGSANAGADYEETEGTVVLKPGETOKESVGIIDDDIFEDDEF 480
QY 481 FVRLSNVRIEEOPEEGMPAIFNSLPLRAVLASPCVATVTLDDDHAGIFTFECDTIH 540
Db 481 FVRLSNVRIEEOPEEGMPAIFNSLPLRAVLASPCVATVTLDDDHAGIFTFECDTIH 540
QY 541 VSESIGVMEVKVLRISGARGIVIPFRYVEGTAKGGEDFEDTGELEKKNDETAKTIRV 600
Db 541 VSESIGVMEVKVLRISGARGIVIPFRYVEGTAKGGEDFEDTGELEKKNDETAKTIRV 600
QY 601 KIVDEEYEROBNEFLIAGEPKWMEGTS-----DVTDRKLTMEEEKKRAEMGKPYL 654
Db 601 KIVDEEYEROBNEFLIAGEPKWMEGTS-----DVTDRKLTMEEEKKRAEMGKPYL 654
QY 655 GEHPLEVIIEESYEFTKTVVDKLIKKTNLALVGTSHMRDQFMEAITYSAAGDEDEDESG 714
Db 655 GEHPLEVIIEESYEFTKTVVDKLIKKTNLALVGTSHMRDQFMEAITYSAAGDEDEDESG 714
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Db 715 EERLPSCEDYVHMLFTVMKVLACVPPTYEGHGNACEAVSLITIGMLTAITIGDLASHRG 774
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Db 841 SVAATYMALOGEPEHVSAGTLAFSVTLFTIFAFCISVLLYRRRPHLGGELGPRCKLA 900
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Db 901 TTMLEFVSLMLYTLFATLEAYCYIKGF 927

RESULT 4

US-09-901-419-2
; Sequence 2, Application US/09901419
; Patent No. US20020069421A1
; GENERAL INFORMATION:

; APPLICANT: The Curators of the University of Missouri

; TITLE OF INVENTION: LARGE SCALE EXPRESSION AND PURIFICATION OF RECOMBINANT

; FILE REFERENCE: UMO1531.1

; CURRENT APPLICATION NUMBER: US/09/901,419

; CURRENT FILING DATE: 2001-07-09

; PRIOR FILING DATE: 2000-01-13

; NUMBER OF SEQ ID NOS: 2

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 2

; LENGTH: 970

; TYPE: PRT

; ORGANISM: Bos taurus

US-09-901-419-2

Query Match 71.4%; Score 3425.5; DB 10; Length 970;
Best Local Similarity 68.7%; Pred. No. 6,3e-291;
Matches 672; Conservative 110; Mismatches 131; Indels 65; Gaps 10;

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Db 1 MAMRLQPLTSAFLHFGVLTFLVTLNGLRAEAGDLRDVPSAGQNNESCGSSDCKEGV 56
QY 59 PLWYENSLGDKIRAVIYFVALIYMLFGVSIINDRFMASTEVITSOEYTIKKPN 118
Db 59 PLWYENSLGDKIRAVIYFVALIYMLFGVSIINDRFMASTEVITSOEYTIKKPN 116
QY 119 GETSTTIRWNETVSNLTLMALGSSAPEILLIEVCGHGFAGDLPSTTVGSAFNM 178
Db 119 GETSTTIRWNETVSNLTLMALGSSAPEILLIEVCGHGFAGDLPSTTVGSAFNM 176
QY 179 IIGICVYVIPDGETRKIKHLRVFEFTAAWSIFAYIMLMIILAFSPGVQVMEGLTL 238
Db 179 IIGICVYVIPDGETRKIKHLRVFEFTAAWSIFAYIMLMIILAFSPGVQVMEGLTL 236
QY 239 FFPVCLLAWVADKRLFFKYMHRKRTDKHRCIIETEGSHPRG---IEMDKMNSH 295
Db 239 FFPVCLLAWVADKRLFFKYMHRKRTDKHRCIIETEGSHPRG---IEMDKMNSH 296
QY 297 VDSFLDGLALY-LEVERODDDEAREMARILKELKOKHPEKIDQLVEMANYALSHOO 355
Db 297 VDSFLDGLALY-LEVERODDDEAREMARILKELKOKHPEKIDQLVEMANYALSHOO 355
QY 349 KSRATFYRIQATRMGTGAGIILKHAQAOKKASSMSEVHTDEPE-DFISKVFPDPCSYOC 407
Db 349 KSRATFYRIQATRMGTGAGIILKHAQAOKKASSMSEVHTDEPE-DFISKVFPDPCSYOC 415
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Db 408 LENCAGVLLTVVRKGGDSKTMVVDYKTEDGSANAGADYEETEGTVVLKPGETOKESV 475
QY 416 LENCAGVLLTVVRKGGDSKTMVVDYKTEDGSANAGADYEETEGTVVLKPGETOKESV 475
Db 416 LENCAGVLLTVVRKGGDSKTMVVDYKTEDGSANAGADYEETEGTVVLKPGETOKESV 475
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Db 468 IIDDIFEEDEHFFVLSNVRIEEOPEEGMPAIFNSLPLRAVLASPCVATVTLDD 532
QY 476 IIDDIFEEDEHFFVLSNVRIEEOPEEGMPAIFNSLPLRAVLASPCVATVTLDD 532
Db 476 IIDDIFEEDEHFFVLSNVRIEEOPEEGMPAIFNSLPLRAVLASPCVATVTLDD 532
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QY 588 EFKNDETAKTIRKAYIDEDEEYEROENFIALGEPKMERG----- 627
Db 593 EFONDEIVKTIISVVIDEEDYEKKKTFELEGPRLEVESEKKALLINELGFTITGKYL 652
QY 628 -----ISDVTDRK--LTMEEEKKRIAEKMPVIGENPRLEVI 663
Db 653 YGDPVERKVAHREHPLRSTTTITADEYDDKOPLTSEKEERRRIAEKMRPLIGETRIEVI 712
QY 664 IESEYERKTVDKLIKKTNNLALVGTSHMRDOPMEAITVSAGDEDESEGERLPSCFD 723
Db 713 IESEYERKSTVDKLIKKTNNLALVGTSHMRDOPMEAITVSAGDEDEDEGEGERLPSCFD 772
QY 724 YMHFTLVENKVLFCVAPPEYCHGACFAVSILLIIGMLTAIIGDLASHGCTIGKDSV 783
Db 773 YMHFTLVENKVLFCVAPPEYCHGACFAVSILLIIGMLTAIIGDLASHGCTIGKDSV 832
QY 784 TAVFVAFGTSVDPTEFSKAAALODYADASIGNVGTSSNANNVFLGIGLANSVAITWAL 843
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QY 844 QGGEFHSAGTLAFSVTLTIFAFVCISVLLYRRRPHLGGELGGPRGCKLATWLFVSLW 903
Db 893 NGEOFKVSPTGLAFSVTLTIFAFINVGVLIRRRRPEIGELGGPRKAKLITSCLEFVLW 952
QY 904 LVIYLFATLEAYCYKGF 921
Db 953 LVIYLFATLEAYCYKGF 970

RESULT 5
US-10-054-680-4
; Sequence 4, Application US/10054680
; Patent No. US20020132998A1
; GENERAL INFORMATION:
; APPLICANT: Fridlund, Carl Johan
; TITLE OF INVENTION: No. US20020132998A1 Human Ion Exchanger Proteins and Polynucleo
; FILE REFERENCE: Lex-0301-USA
; CURRENT APPLICATION NUMBER: US/10/054,680
; CURRENT FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: US 60/263,384
; PRIOR FILING DATE: 2001-01-23
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 620
; TYPE: PRT
; ORGANISM: homo sapiens
; S-10-054-680-4
Query Match 64.5%; Score 3093; DB 12; Length 620;
Best Local Similarity 100.0%; Pred. No. 3.7e-262;
Matches 555; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MAMLRLOPLTSAPLHGLVTFVLNLGLRAEAGSGDPVSTGONNESCSSGSDCKEGVIL 60
Db 1 MAMLRLOPLTSAPLHGLVTFVLNLGLRAEAGSGDPVSTGONNESCSSGSDCKEGVIL 60
QY 61 PIWYPPNSLGDRIARIVYFVALIYFGLVSIADRFMASIEVITSQEREVTIKKPNGE 120
Db 61 PIWYPPNSLGDRIARIVYFVALIYFGLVSIADRFMASIEVITSQEREVTIKKPNGE 120
QY 121 TSTTTIRVNMETVSNLTLMLGSSAPRLLSLIEVCGHGIADLGGSTVGSAAFMET 180
Db 121 TSTTTIRVNMETVSNLTLMLGSSAPRLLSLIEVCGHGIADLGGSTVGSAAFMET 180
QY 181 IIGICVVIDGERTKIKHLRVEFTTAAGSIFAYIMLYMLIAVSPVVOVWEGCLTLFF 240
Db 181 IIGICVVIDGERTKIKHLRVEFTTAAGSIFAYIMLYMLIAVSPVVOVWEGCLTLFF 240
QY 241 FVPCVLLAWADKRLLEFYKMKRYRTDKHGIIIEEGDHPKGIENDGKMNSHFLDGN 300
Db 241 FVPCVLLAWADKRLLEFYKMKRYRTDKHGIIIEEGDHPKGIENDGKMNSHFLDGN 300

Db 241 FVPCVLLAWADKRLLEFYKMKRYRTDKHGIIIEEGDHPKGIENDGKMNSHFLDGN 300
QY 301 LVPLEGKEVEDSREMRIRILDKOKHPEKDLDOVEMANYVALSHOOKSRAEYRQATR 360
Db 301 LVPLEGKEVEDSREMRIRILDKOKHPEKDLDOVEMANYVALSHOOKSRAEYRQATR 360
QY 361 MMGAGNIIKHAHQKAKSSMSEVHTDEPEDFISKVFDPSCYOCLNCGAVLLTVR 420
Db 361 MMGAGNIIKHAHQKAKSSMSEVHTDEPEDFISKVFDPSCYOCLNCGAVLLTVR 420
QY 421 KGGDMSTMYVDKTEGDSANAGADYEFTGTIVLKGTEOKESVGIIDDDIIFEDEHF 480
Db 421 KGGDMSTMYVDKTEGDSANAGADYEFTGTIVLKGTEOKESVGIIDDDIIFEDEHF 480
QY 481 FVRLSNRIEEDQPEEBMPAIFNSLPLPRAVLASPCVATVTIIDDHAGITFECDTH 540
Db 481 FVRLSNRIEEDQPEEBMPAIFNSLPLPRAVLASPCVATVTIIDDHAGITFECDTH 540
QY 541 VSESIGMEVYKVLRTSGARCTIVPFTVEGTAKGGGEDEDTYGELEFNDETIV 595
Db 541 VSESIGMEVYKVLRTSGARCTIVPFTVEGTAKGGGEDEDTYGELEFNDETIV 595
RESULT 6
US-09-864-761-33429
; Sequence 33429, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
; APPLICANT: Penn, Sharon G.
; APPLICANT: Rank, David R.
; APPLICANT: Hanzel, David K.
; APPLICANT: Chen, Wensheng
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO
; FILE REFERENCE: Aeomica-X-1
; CURRENT APPLICATION NUMBER: US/09/864,761
; CURRENT FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/180,312
; PRIOR FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 09/632,366
; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: GB 24263,6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00662
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00661
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 60/234,687
; PRIOR FILING DATE: 2000-09-21
; PRIOR APPLICATION NUMBER: US 09/608,408
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: US 09/774,203
; PRIOR FILING DATE: 2001-01-29

RESULT 7
US-09-864-761-33926
; Sequence 33926, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:

	Query Match	8.8%;	Score 424;	DB 10;	Length 91;	
	Best Local Similarly	86.7%;	Pred.No. 4.1e-30;			
	Matches 78;	Conservative	6;	Mismatches	6;	Indels 0;
Gy	707	DEDESGEERLPSCFDYVHFLTFVFWKLFACVPPTXCHMGAFASILLIGMLTAII	766			

```
Db 2 DDDDCGCEBKLPCFCDYVNHFLTFWVKYLFAPVPTETWNGMACIVSLTIGLLTAFT 61
Oy 767 GDLASHFGCTIGLKDSTAVVAFVAGTSVP 796
Db 62 GDLASHFGCTIGLKDSTAVVAFVAGTSVP 91

RESULT 8
US-10-094-214-5
; Sequence 5, Application US/10094214
; Patent No. US20020132303A1
; GENERAL INFORMATION:
; APPLICANT: Curtis, Rory A.J.
; APPLICANT: Millennium Pharmaceuticals Inc.
; TITLE OF INVENTION: 69318, A Human Sodium/Calcium Exchanger
; TITLE OF INVENTION: (Transporter) Family Member and Uses Therefor
; FILE REFERENCE: MP101-038PIRM
; CURRENT APPLICATION NUMBER: US/10/094, 214
; CURRENT FILING DATE: 2002-03-08
; PRIOR APPLICATION NUMBER: 60/275, 078
; PRIOR FILING DATE: 2001-03-12
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 661
; TYPE: PRP
; ORGANISM: homo sapiens
US-10-094-214-5

Query Match 5.0%; Score 239.5; DB 12; Length 661;
Best local Similarity 18.5%; Pred. No. 1.3e-12;
Matches 166; Conservative 109; Mismatches 249; Indels 375; Gaps 32;

Oy 39 PSTGONNESGSSDCKEGVILPIWPNP-SIGD-KIARIVYVVALIYMFVGSTIAD 96
Db 101 PRLSKEGES-ENSTDNAQD-----YPKDIFSLEBRKGAIIILAVGIMTFALAIYCD 134
Oy 97 R-FMASIEVITTSQREVTYIKKPNGETSTTIRVWNETVSNLTLMAGSSAPETILSLIEV 155
Db 155 EFVPSLTVITER-----LGI-SDVAGATFMAAGSAPETILSLIGV 196
Oy 156 CGHGFTA-GDLPSTIYGSAAFMFTIIGICVYIPDGETRKRKHLRVFTTAAWSTFAY 214
Db 197 ----FLASHNVGIGTIVGSVFNILFVIGCALF-----SREILNL-----TWMPLEFRD 241
Oy 215 IWL-----MILAVSPGVVQVWEGLLTEFFPVYLLAVVADKRLIFYVYMKKVRTDK 269
Db 242 VSFYIYDLMLIFELDNVIMWESLLLTAY-FCY-----VYMKF----- 282
Oy 270 HRCIIETEGDHPKGIEMDGKMMNSHFLDGNLVPLEGEVDESRRERIRILDKOKHPE 329
Db 283 -----NVOEKVWKQINNKVYKVTAP 306
Oy 330 -----KLLDOLVEMANYALSHOOKSAFRIQATRMATGAGNLKHAABQAKKAS 381
Db 307 AQAKPSAARCKDEPTLPK-----PRLQGGSSASLHNSLHNSIFOLW--- 350
Oy 382 SMSEVHTDEDEDFISKVFDPGSCYOCLENGAVLLFVVRKGGMSKMYVDYTEDGSAN 441
Db 351 ----IHLDP-----LAELGSYGKIKYIDYMTBEG--- 377
Oy 442 AGADYEFTCTGVVLPKGETQKESVGIIDDDIFEEDHFFVRLSNVRIEEOPEEGMPA 501
Db 378 -----RRERKASIL----- 386
Oy 502 IFNSLPLPRAVNLASPCYATVITLDDHAGLFTTECDTIHVSISIGWAEVVLRTSGARGT 561
Db 387 -----HKIARKK-----HVDEN-----ERONGANH 408
Oy 562 VIVPRTVECTAKGGDEFDYGELEFKNDVETKIRKIVDEEVEERQENFIALGEP 621
Db 409 V-----EKIELPN----- 416
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Oy 622 KMERGISDVTDRKLWEEBEAKRIAMGKPVIGEHKPLEVIIIESEYEKTVDKLIKT 681
Db 417 -----STSDVEMTPSSDASEPVN----- 436
Oy 682 NLALVYCTHWRQOFMEATIVSAAGDEDESGEERLPSCFDYVMHPLTF-----WKY 735
Db 437 -----GNLSHNIEGAEOQ-----ADEEDQPLSLAMPSTRRKQVTLFVPLPLMT 486
Oy 736 LFACVPPTTEYCHGMACFVAVSILITIGMLTALIGDLASHFGCTIGLKDSTAVVAFVAGTSV 795
Db 487 LPDVRKPPSSKRPPIITFFGSIWIAVFSYLMVMMWAVGEGTIGISEIMGLTILAGTSTI 546
Oy 796 PPTFASKAALQDVYDASTIGNVTSNANVFLIGLANSVAALIVNALQGEHVSAGTL 855
Db 547 PDLITSYIVARKGL-CDMAVSSVGSNIFDITVGLPLPLMLTYVIRHFPVAVS-SNGLE 604
Oy 856 AFSVTLFTTIFAFVCISVLV-YRRRPHLGEELGCPGCKKATWLVLSMLLTIFATL 912
Db 605 CAIVLFTMLLEFVILSTALCKMRMKNKILG-----FIMGLTFVFLVSVL 649

RESULT 9
US-09-961-679-2
; Sequence 2, Application US/09961679
; Patent No. US20020107380A1
; GENERAL INFORMATION:
; APPLICANT: Friddle, Carl Johan
; APPLICANT: Gerhardt, Brenda
; TITLE OF INVENTION: No. US20020107380A1el Human Ion-Exchanger Proteins and Polynuc
; FILE REFERENCE: LEX-0239-USA
; CURRENT APPLICATION NUMBER: US/09/961, 679
; CURRENT FILING DATE: 2001-09-24
; PRIOR APPLICATION NUMBER: US 60/235, 745
; PRIOR FILING DATE: 2000-09-27
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 603
; TYPE: PRP
; ORGANISM: homo sapiens
US-09-961-679-2

Query Match 4.9%; Score 234.5; DB 10; Length 603;
Best local Similarity 17.0%; Pred. No. 3.1e-12;
Matches 146; Conservative 98; Mismatches 212; Indels 401; Gaps 28;

Oy 77 VIVYFVALIYMFVGVSTIADR-FMASIEVITTSQREVTYIKKPNGETSTTIRVWNETVSN 135
Db 100 VLLHIIIGALYMFALAIYCDFFVPSLEKICERLH-----LSEDVAG 141
Oy 136 LTLMALGSSAPETILSLIEVCGHGFTA-GDLPSTIYGSAAFMFTIIGICVYIPDGET 194
Db 142 ATFMAAGSSITPELPASVIGY-----FITHGVDGVTIGVSAVFNILCTIGCGLEFA--GOV 195
Oy 195 RKIKHLRVFTTAAWSTIFAYIMLAVSPGVVQVWEGLLTEFFPVYLLAVVADKRL 254
Db 196 VRLTMAVAVCRDSYUUTISVIV--LIVFIYDEQIVL-WEGVLVILIVFYIL----- 243
Oy 255 LLYUKYMKKYPTRDKHRCIIETEGDHPKGIEMDGKMMNSHFLDGNLVPLEGE---VD 310
Db 244 IMRYNNKMQAFYVKKST-----ANGNEPVNSLEBAVKEKPYGYNPPVAVMD 290
Oy 311 ESRREMITRLDKOKHPEKDLQDV-----EMAYVYVLSHQKSAFVRIQATR 360
Db 291 E-----IMSSPKFTFPEAGLIMITNKGPRTRLMASRIIINERQ-----R 334
Oy 361 MMTGAGNIIKKHAABQAKKASSMSEVHTDEDEDFISKVFDPGSCYOCLENGAVLLTVR 420
Db 335 LINSANGVSSKPLONGRHEIENGNNVVENPED----- 367
Oy 421 KGDMSKTMVVDYKTEDGSANAGADYEFTGTIVVLPKGETQKESVGIIDDDIFEEDHFR 480
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Db 368 -----POQNO----- 372
Oy 461 FVRLSNVRIEERPEGMPPAIFNSLPLRAVLASPCVATVILLDDHAGITFECDTH 540
Db 373 -----EQPPPPPP-----PEPEVEA----- 390
Oy 541 VSESIGVNEVKVLRSGARGVIVPFRVECTAGKGGEDFEDTGYELFKNDFTKIRV 600
Db 391 -----DLSFSPVPEARGKV----- 406
Oy 601 KIVDEEYEROEFTALGCEPRWMEGJSDVTDRLKTMEEBAKRIAEKRGVLGEHPKL 660
Db 407 -----KVV----- 409
Oy 661 EVIIESEYEFKTVDKLTKTNLALVGTSHWRDQFMEATVSAAGDEDESGERLPS 720
Db 410 -----FTWPLFLLCVLT-----PN 424
Y 721 C-----FDYVMHFLTFWVKVLFACVPTPEYCHGMACFAVSLILIGMLTAIGDLASHF 773
Db 425 CSKPRMEKFMVTFITATLMIAVF-----SYIMWLVTTI----- 459
Oy 774 GCTIGLKDSVTAIVFAVGTSPDTPFASKAALQDVADASIGNVTSNAVNVFLGIGLA 833
Db 460 GTTLGIPVIMGIFTLAAGTSPDCMASLIVARQGL-GDMASNTIGSNVFDILVGLGVP 518
Oy 834 MSVAIYVALOGQEFHVSAGTLAFSVTLFTIFAFVCISVL-LYRRPHLGGELGPGRCCK 892
Db 519 WGLQTMV-VNGSTVKINSRGLVSVVL--LLGSVALTVLGIHLNKRDLRKLG----- 569
Oy 893 LATVWLFVSLMLTYLF 909
Db 570 -----YVVLVLYAIF 579

RESULT 10
US-10-094-214-4

; Sequence 4, Application US/10094214
; Patent No. US20020132303A1
; GENERAL INFORMATION:
; APPLICANT: Curtiss, Romy A.J.
; TITLE OF INVENTION: 69318. A Human Sodium/Calcium Exchanger
; FILE REFERENCE: MP101-038B1M
; CURRENT APPLICATION NUMBER: US/10/094.214
; PRIOR FILING DATE: 2002-03-08
; PRIOR APPLICATION NUMBER: 60/275,078
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 152
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: consensus
US-10-094-214-4

Query Match 4.1%; Score 194.5; DB 12; Length 152;
Best Local Similarity 34.4%; Pred. No. 1.1e-09;
Matches 54; Conservative 28; Mismatches 55; Indels 17; Gaps 4;

Oy 756 IITIMLTAIIGDLASHFCTIGLKDSVTAIVFAVGTSPDTPFASKAALQDVY-ADAS 814
Db 2 LIVLGL--ADLFVDGASALAEVIGISESVGLTLVNLGTSLPFLASFLAALGQADIA 59
Oy 815 IGVNVSNAVNVFLGIGLMSVAIYVALOGQEFHVSAGTLAFSVTLFTIFAFVCISVL 874
Db 60 IGVNIGSNFENLTLGIGLASLAPLYHAKGGSFIVDPISLRDV-LFLLVLLILTYLF 118
Oy 875 YRRRPHLGGELGPGRCCKLATVWLFVSLMLTYLFAT 911

Db 119 LLGRSLIGRGD-----VLLILTYLYLT 142

RESULT 11

US-09-961-679-6
; Sequence 6, Application US/09961679
; Patent No. US20020107380A1
; GENERAL INFORMATION:
; APPLICANT: Fridde, Carl Johan
; TITLE OF INVENTION: No. US20020107380A1 Human Ion-Exchanger Proteins and Polynuc
; FILE REFERENCE: LEX-0239-USA
; CURRENT APPLICATION NUMBER: US/09/961,679
; PRIOR FILING DATE: 2001-09-24
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 353
; TYPE: PRT
; ORGANISM: homo sapiens
US-09-961-679-6

Query Match 3.4%; Score 165; DB 10; Length 353;
Best Local Similarity 22.3%; Pred. No. 1.6e-06;
Matches 78; Conservative 54; Mismatches 131; Indels 86; Gaps 14;

Oy 616 IALGEPKMERGISDVTDRKLTMEEBEAKRIAEK-PVL-----GHPK-----L 660
Db 12 IANGNP-----VNSELEAVKEKQYKGNPNVYMDELSSSPPTFTPEACL 57
Oy 661 EVIIESEYEFKTV-----DKLTKTNLALVGTSHWRDQFMEATVSAAGDE 709
Db 58 RIMITNKFGRTRLRMASRIINEROLINSANGVSSKPLQNGRHNENIGNVPENPED 117
Oy 710 EDESGEERLPS-----FDYVMHFLT-----VF-KVYLFA-----CVP 741
Db 118 POQNOEQPPPPPPPEPPPEVADFLSPVSBEARGDKVWFTPLIFLCVTTIPNCSK 177
Oy 742 PREYCHGMACFAVSLIITIMLTAIIGDLASHFCTIGLKDSVTAIVFAVGTSPDTPFAS 801
Db 178 PMKEKFMVTFITATLMIAVFSYIMWLVTTIIGTIGTIDVIMGIFTLAAGTSPDCMAS 237
Oy 802 KAAALQDVADASIGNVTSNAVNVFLGIGLMSVAIYVALOGQEFHVSAGTLAFSVTL 861
Db 238 LIVARQGL-GDMASNTIGSNVFDILVGLGVPWGLQTMV-VNGSTVKINSRGLVSVVL 295
Oy 862 FTIFAFVCISVL-LYRRPHLGGELGPGRCCKLATVWLFVSLMLTYLF 909
Db 296 --LLGSVALTVLGIHLNKRDLRKLG-----YVVLVLYAIF 329

RESULT 12

US-09-961-679-4
; Sequence 4, Application US/09961679
; Patent No. US20020107380A1
; GENERAL INFORMATION:
; APPLICANT: Fridde, Carl Johan
; TITLE OF INVENTION: Same
; FILE REFERENCE: LEX-0239-USA
; CURRENT APPLICATION NUMBER: US/09/961,679
; PRIOR FILING DATE: 2001-09-24
; PRIOR APPLICATION NUMBER: US 60/235,745
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 4
; LENGTH: 316
; TYPE: PRT

ORGANISM: homo sapiens
US-09-961-679-4

Query Match 3.4%; Score 162.5; DB 10; Length 316;
Best Local Similarity 23.5%; Pred. No. 2, 2e-06;
Matches 65; Conservative 47; Mismatches 112; Indels 53; Gaps 10;

QY 662 VIIIESEYEFYTVKLIKTKNLALVGTSHMRDQFMEATVSAAGDEDESGERLPSC 721
DB 40 IITNER-----QRLINSANGVSSKPLQNGRHEINENGWPEVNPEDPOONGQPPQ 92
QY 722 -----FDVYMHFLT-----VF-KVLF-----CYPPEYCHGNACFA 753
DB 93 PPPPEPEPEADFLSPSPVPEARGDKVWFTWPLFLCCTIPNCKSPRMEKFFWTFI 152
QY 754 VSIIILITLAIIGDLASHFCTIGLKSTAVFVAFGTSPDTFASKAALODVYADA 813
DB 153 TATLMTAVFYIMVLTITIGTIGLIDVIMGITFLAAGISVDCASLVAAGL-GDM 211
QY 814 SIGNVGSNAVNFPLGILAMSVAAIYALOGGEFHVSACTLAFTVLTTFAPVCISVL 873
DB 212 AVSNTIGSNFEDILVIGVFWGLQTMV-VNYGSTVKINSRGLVSVVL--LIGSVALTVL 268
QY 874 -LYRRRPHLGEELGPRGCKLATTWLFVSLMLYILF 909
DB 269 GIHLNKRRLDRKLG-----VYLVLYALP 292

RESULT 13
US-09-864-761-37185
Sequence 37185, Application US/09864761
Patent No. US20020048763A1
GENERAL INFORMATION:
APPLICANT: Penn, Sharon G.
APPLICANT: Rank, David R.
APPLICANT: Hanzel, David K.
APPLICANT: Chen, Wensheng
TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
FILE REFERENCE: Aecomica-X-1
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04
PRIOR APPLICATION NUMBER: US 60/236,359
PRIOR FILING DATE: 2000-09-27
PRIOR APPLICATION NUMBER: PCT/US01/00666
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00667
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00664
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00669
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00665
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00668
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00663
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00662
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00661
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: PCT/US01/00670
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: US 60/234,687

PRIOR FILING DATE: 2000-09-21
PRIOR APPLICATION NUMBER: US 09/608,408
PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
NUMBER OF SEQ ID NOS: 49117
SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
SEQ ID NO 37185
LENGTH: 42
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: MAP TO AC007377.3
OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.68
OTHER INFORMATION: EXPRESSED IN BRAIN, SIGNAL = 0.8
OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 0.86
OTHER INFORMATION: EXPRESSED IN FETAL LIVER, SIGNAL = 0.57
OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 0.92
OTHER INFORMATION: EXPRESSED IN PLACENTA, SIGNAL = 0.69
OTHER INFORMATION: EST_HUMAN HIT: BE936105.1, EVALUATE 5.00e-05
OTHER INFORMATION: SWISSPROT HIT: Q01728, EVALUATE 2.00e-18
US-09-864-761-37185

Query Match 3.1%; Score 151; DB 10; Length 42;
Best Local Similarity 80.6%; Pred. No. 9, 1e-07;
Matches 29; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

QY 636 LTMEEERAKRIAMGKPVGLGHPKLEVIIESEYEFK 671
DB 7 LTSKEEERAKRIAMGKPVGLGHPKLEVIIESEYEFK 42

RESULT 14
US-10-094-214-2
Sequence 2, Application US/10094214
Patent No. US20020132303A1
GENERAL INFORMATION:
APPLICANT: Curtis, Rory A.J.
APPLICANT: Millennium Pharmaceuticals Inc.
TITLE OF INVENTION: 69318, A Human Sodium/Calcium Exchanger
FILE REFERENCE: MP101-038PIRM
CURRENT APPLICATION NUMBER: US/10/094,214
CURRENT FILING DATE: 2002-03-08
PRIOR APPLICATION NUMBER: 60/275,078
PRIOR FILING DATE: 2001-03-12
NUMBER OF SEQ ID NOS: 5
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 2
LENGTH: 584
TYPE: PRT
ORGANISM: homo sapiens
US-10-094-214-2

Query Match 2.4%; Score 116.5; DB 12; Length 584;
Best Local Similarity 21.7%; Pred. No. 0.061;
Matches 60; Conservative 41; Mismatches 84; Indels 91; Gaps 14;

QY 25 LNLRAEAGS---SGDVPSRGN-----NESC---SSSDC 54
DB 24 VSGTSGSSGTAHISPOPPASGVNOTPVVDCRKVCGLVNSDRDCFITRPDCSHSDGGLYD 83
QY 55 KEGV-----ILPIVWPENPSLGDRIARYVYFVALIYFGLGVSTIADRFMAISIVITS 107
DB 84 LBSICFHPFSLPL-----AVTLVSMULVILFLIGVYAKKFFC----- 123
QY 108 QEREVTIKRPNGETSTTIRVMNETVSNLTLMALGSSAPEILLSILEVCGHGFIAGDLGP 167
DB 124 -----PNLSAISTTLKL-SHNVAGVTFLAFGAGADIFSAIVAF-----SDPRT 166
QY 168 STIVGSAARFMFIITIGICIVYIPDGETRKIKHLRVFTFAAMSIFAYMLYML-----L 221
DB 167 AGIALGALFGAGLV---TTVAVAGIT--ILHP-----FMAASRPFDFIVYVAVFLTFL 218

OY 222 AVESPGVQVME-GLTLEFPVPV--CVLLAMVADR 254
DB 219 MLEFRGVTILAMALGYLGLVYFYVYVILCTWYQRO 254

RESULT 15

US-09-815-242-12135

Sequence 12135, Application US/09815242

Patent No. US20020061569A1

GENERAL INFORMATION:

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TITLE OF INVENTION: Identification of Essential Genes in
TITLE OF INVENTION: Prokaryotes
FILE REFERENCE: ELITRA.011A
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NUMBER OF SEQ ID NOS: 14110
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 12135
LENGTH: 657
TYPE: PRT
ORGANISM: Staphylococcus aureus
US-09-815-242-12135

Query Match 2.4%; Score 116; DB 10; Length 657;
Best Local Similarity 20.8%; Pred. No. 0.081;
Matches 91; Conservative 55; Mismatches 133; Indels 158; Gaps 22;

OY 556 SGARGTIVPRTVEG-----TAKGGGEDE-----DYGE 586
DB 26 STVADGVATARYKMOGYDVRVLTGTDEHQOKIOEKAOKAKTEIEYLDIEMIGIKOLMAK 85
OY 587 LEFKNDERVKT--RVKIYDEEYER--QENFIALGEPKWMERGTSIDVDRKLTMEEEEA 643
DB 86 LEISNDDEFRTTEERKHKHYEVOFERKLQGDIVLGE---YEGWVSPDETYTESQLV 141
OY 644 KRIEMGKPVLEENP---KLEVIIESEYEFTT--VDKLIK----- 679
DB 142 DPOYENGKTIIGKSPDSGHEVELVKESEYFNISKYTDRLLEFYDONPFIQPPSRKNEM 201
OY 680 -----KTNLA-LV-----GTH-----SMRDOFMEATIVSAAGDEDEDES--- 713
DB 202 INNFIKPGIADLAVSRTSEFMGCVHVPSPNKHVYVWIDALVNYI--SALGYLSDDESLEN 259
OY 714 -----GEERLPSCDVMHFLYWKVLFAC---VPPTXCHGNACFAVSILTI 759
DB 260 KYWPDHILMAKE-----IVRFHSITWPIILLALDLPKKVFAHGW-----LMKD 306
OY 760 GMLTAIIGD-----LASHFGCTIGLKDSVTAVVFAFGTSVDTFASKAALQDVYADA 813
DB 307 GKMSKSKGNVVDPNLIDRYGLDATTRYILMRLEPFGSDGVFTPEAFVER-----TNF 358

OY 814 SIGNVTGSNAVNVFLGIGLANSVAATY-----ALOG-----QEFHVS 851
DB 359 DIANDLG-NLVNRTI-----SMINKYFDGELPAYOGPLHELDENEMANALETVSYTES 411
OY 852 AGTLAFSVTLFTTFAFV 868
DB 412 MESLOFSVALSTIWKFI 428

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